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PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re application of

Docket No: Q58612

Masanori MUKAIYAMA, et al.

Appln. No.: 09/541,593

Group Art Unit: 2157

Confirmation No.: 4884

Examiner: Shaojun Wen

Filed: April 3, 2000

For: DEVICE MANAGEMENT NETWORK SYSTEM, MANAGEMENT SERVER, AND COMPUTER READABLE MEDIUM

SUBMISSION OF APPELLANT'S BRIEF ON APPEAL

MAIL STOP APPEAL BRIEF - PATENTS

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Sir:

Submitted herewith please find an original and two copies of Appellant's Brief on Appeal. A check for the statutory fee of \$330.00 is attached. The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account. A duplicate copy of this paper is attached.

Respectfully submitted,

Allison M. Tulino  
Registration No. 48,294

Void date: 04/12/2004 SMINASS1  
04/12/2004 SMINASS1 00000004 09541593  
01 FC:1401 330.00-OP

SUGHRUÉ MION, PLLC  
Telephone: (202) 293-7060  
Facsimile: (202) 293-7860

WASHINGTON OFFICE

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CUSTOMER NUMBER

Date: April 9, 2004

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**APPELLANTS' BRIEF ON APPEAL UNDER 37 C.F.R. § 1.192**

**MAIL STOP APPEAL BRIEF - PATENTS**

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Sir:

In accordance with the provisions of 37 C.F.R. § 1.192, Appellant submits the following:

**I. REAL PARTY IN INTEREST**

Based on information supplied by Appellants and to the best of the Appellants' legal representative's knowledge, the real party in interest is the assignee, SEIKO EPSON CORPORATION.

**II. RELATED APPEALS AND INTERFERENCES**

There are no other related appeals or interferences known to Appellants, Appellants' legal representative, or assignee, which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending Appeal.

**III. STATUS OF CLAIMS**

Claims 1-13 stand rejected and are presently being appealed.

**IV. STATUS OF AMENDMENTS**

No proposed claim amendments have been made after the final Office Action dated October 9, 2003. Therefore, all amendments, which have been made during the prosecution of the present application, have been entered.

**V. SUMMARY OF THE INVENTION**

Figure 1 shows an illustrative, non-limiting embodiment of the present invention, which relates to a device management network system for managing the operation status of network devices. The management network system contains a plurality of network devices 10, a management server 20, a plurality of client devices 30, and a communication medium 40 (pg. 7, lines 15-21 of the present Application). The network devices 10 can include, for example, printing devices (pg. 7, lines 16-17 of the present Application).

To monitor the operation status of a printing device 10, a user activates a web browser in the client device 30, to display a device management page from the management server 20 (pg. 18, lines 3-6 of the present Application). The device management page hyperlinks to a device list page including information of respective printing devices 10 (pg. 8, lines 6-11 of the present Application). Once a user clicks on a device icon in the device list page, information is

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exchanged between the client device 30, the management server 20 and the printing device 10. Such exchange results in a display of a device-details screen that represents the operating status of the selected printing device 10, on the display of the client device 30 (pg. 8, lines 12-20 of the present Application).

In a non-limiting embodiment, for example, when a client device 30 sends a device-details screen request to a management server 20, a screen data generating part 23 of the management server 20 retrieves information from a MIB database 150 of the printing device 10 (Fig. 11; pg. 18, lines 12-18 of the present Application). The retrieved status information is then sent to the client device 30 via the web server part 22 and the network interface part 21 of the management server 20 (pg. 21, lines 12-25 of the present Application).

In another non-limiting embodiment, a trap processing part 24 of the management server 20 receives SNMP trap messages from a printing device 10 indicating that an operating status of the printing device 10 has just changed (pg. 22, line 23 to pg. 23, line 13 of the present Application). Once the SNMP trap message is received, the trap processing part 24 of the management server 20 sends a change notifying packet to each client device 30 that currently displays a device details screen of the printing device 10 that sent the SNMP trap message, for a continual update of information (pg. 23, lines 14-22 of the present Application).

**VI. ISSUES**

1. Are claims 1, 4, 5, 6, 9 and 12 unpatentable over U.S. Patent No. 6,418,469 to Justice et al. ("Justice") and U.S. Patent No. 6,308,205 to Carcerano ("Carcerano")?
2. Are claims 2, 3, 7, 8, 10, 11 and 13 unpatentable over Justice, Carcerano and U.S. Patent No. 6,360,255 to McCormack ("McCormack")?

**VII. GROUPING OF CLAIMS**

Claim 1-13 do not stand or fall together for purposes of appeal. Specifically, the claims are grouped in the following manner:

1. Claims 1, 4, 5, 6, 9 and 12 stand or fall together; and
2. Claims 2, 3, 7, 8, 10, 11 and 13 stand or fall together.

**VIII. ARGUMENTS**

1. Claims 1, 4, 5, 6, 9 and 12 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Justice in view of Carcerano. Appellants submit that the claims are patentable over the cited references.

**A. Claim 1**

Appellants submit that Justice and Carcerano (alone or in combination) do not disclose or suggest a management server that obtains status information from a network device, when the management server receives a request from a client device.

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For example, as recited in claim 1, “a status information obtaining part for, **when receiving a device-details screen request** containing identification information of a network device among said one or more network devices from a client device running a Web browser, **obtaining status information** stored in said status information storing part of the network device...”. Based on the foregoing, Appellants submit that claim 1 clearly recites that status information is obtained when a device-details screen request is received.

In further detail, claim 1 recites a management server having both a status information obtaining part and an information sending part. When the status information obtaining part receives a device-details screen request from a client device, the management server obtains status information stored in a status information storing part of a network device. In other words, the receipt of a device-details screen request, by the management server, triggers the event of obtaining status information stored in the network device, i.e. “when” receiving a device-details screen request, as recited in claim 1 ( i.e., non-limiting embodiment of pg. 18, lines 12-18 and pg. 21, lines 21-25 of the present Application). The information sending part of the management server then sends information indicating any abnormalities of the network device to the client device that sent the device-details request.

The Examiner acknowledges that Justice fails to teach or suggest the above features, but contends that Carcerano does. However, Appellants respectfully disagree. For example, in Carcerano, when a management system receives a request for status information of a network device from a web browser (or client device), the management system generates a response

based on a database in the management system, rather than on information obtained from the specified network device (i.e. when a request is received) (col. 2, lines 16-20). Therefore, contrary to claim 1, the management system of Carcerano does not obtain status information from a status information storing part provided in the network device, "when" a request is received from a web browser (client device).

Appellants note that Carcerano specifically affirms the above assertion, i.e. as disclosed in Carcerano, "When the management system receives a request from a web browser for status or configuration information of a network device, the system generates an appropriate response based on the database rather than on information obtained directly from the network device." (emphasis added)(col. 2, lines 16-20).

Stated in more detail, management system 109 of Carcerano periodically polls each network device in network 1 for configuration information (Fig. 5; col. 10, lines 65-67). Results of the polling operations are stored in database 105 of the management system 109 (col. 11, lines 34-37). Then, when a requesting station, such as workstation 70 (client device), communicates with management system 109 to obtain status and configuration information of a network device, a response is generated from database 105 of management system 109, and communicated to workstation 70 via browser 83 (col. 11, lines 38-50). Therefore, rather than communicate with the network device when a request is received by workstation 70, the management system 109 generates a response from its own database 105.

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In summary, the management system 109 first obtains and stores information from a network device, and then, when requested, the management system 109 sends the information directly to a client device (workstation 70) without referring back to the network device. On the contrary, in claim 1, a client device first requests information from the management server, the management server then communicates with a network device for the requested information, and in turn, the management server reports back to the client device. Thus, rather than cure the deficient teachings of the Justice reference, Carcerano appears to teach away from the recitations of claim 1.

Also, since the claimed management server communicates with a network device when a request is received, the management server supplies truly "current" status or abnormality information to the client device. Any resources dedicated to polling can be eliminated or at least reduced. Further, in addition to the claimed invention, the present Application does disclose a non-limiting embodiment where continual updating of information is possible (i.e. pg. 3 of the Appeal Brief; pg. 23, lines 14-23).

In the January 30, 2004 Advisory Action, the Examiner continues to maintain his position. In support of the Examiner's position, the Examiner refers to col. 13, line 30 to col. 14, line 30, of Carcerano (Continuation Sheet of Advisory Action). In particular, Carcerano discloses that in response to a request, a response is dynamically generated at least in part on the configuration information stored in the database of the network management protocol (col. 13, lines 44-49). The Examiner maintains that the cited portion indicates not only that Carcerano

relies on the database information, but also can generate a dynamic response by polling the network devices repeatedly. However, as an initial matter, the phrase "at least in part", i.e., col. 13, line 48, is not defined. Further, the repetitive polling of the network devices is performed in order to keep the databases of the network management protocol more or less up to date, i.e. "polling is repeated to keep database 105 current as to the status and configuration of those devices." (col. 14, lines 28-30). As set forth above, the database 105 is maintained to reflect the status of the network devices, so that a response can be generated from the database 105 of the management system 109, without referring back to the network device when a request is received.

Accordingly, Appellants maintain that Carcerano fails to cure the deficient teachings of Justice. Therefore, Appellants submit that claim 1 is patentable over the cited references.

#### **B. Claims 4 and 5**

Since claims 4 and 5 are dependent upon claim 1, Appellants submit that such claims are patentable at least by virtue of their dependency.

#### **C. Claims 6, 9 and 12**

Since claims 6, 9 and 12 contain features which are analogous to the features recited in claim 1, Appellants submit that claims 6, 9 and 12 are patentable over the cited references for at least analogous reasons as presented above.

2. Claims 2, 3, 7, 8, 10, 11 and 13 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Justice, Carcerano and McCormack. Appellants submit that the claims are patentable over the cited references.

**A. Claims 2 and 3**

Appellants submit that Justice, Carcerano and McCormack (alone or in combination) do not disclose or suggest sending, from a management server to a client device, information containing names of image files associated with abnormalities or status information in a network device.

For example, claim 2 recites that the management server sends information containing names of image files associated with abnormalities, as specified by the specifying part, to the client device that sent the device-details screen request. In claim 1, upon which claim 2 depends, the specifying part of the management server is disclosed as specifying abnormalities of a network device based on status information obtained from the network device. Similarly, claim 3 recites that the management server stores a plurality of image files, and selects image files that correspond to information in the status information obtained from the network device. The image files are sent to the client device that sent the device-details screen request.

The Examiner acknowledges that Justice and Carcerano fail to teach or suggest the features of claims 2 and 3, but contends that McCormack does.

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McCormack discloses the performance of automated upgrades (i.e. software upgrades) in network devices through a managed network (col. 2, lines 55-60). For example, a network management server 104 sends interface data to client 106 for providing customized views to allow the user 150 to perform software upgrades on network devices 140a-140c in network 108 (Fig. 1A; col. 5, lines 7-11).

Appellants submit that such disclosure fails to teach or suggest sending information containing names of image files associated with any “abnormalities” or “status information” of a network device to a client device that sent the request, as recited in claims 2 and 3.

Further, the Examiner points to column 5, lines 26-30 as showing the features of claims 2 and 3. However, even if Appellants assume *arguendo* that the software image files of McCormack are analogous to the claimed image files, such portion of McCormack discloses that the software image files are sent to the network management server 104 from the customer connector server 102, rather than from the network management server 104 to the customer connector server 102.

In view of the above, Appellants submit that McCormack fails to cure the deficient teachings of Justice and Carcerano.

Appellants further note that arguments similar to the above arguments were presented in both the May 12, 2003 Amendment and the January 9, 2004 Amendment. However, the Examiner has not responded to the substance of Appellants’ statements. Accordingly, Appellants continue to maintain that claims 2 and 3 are patentable over the cited references.

In addition, Appellants submit that claims 2 and 3 are patentable over the cited references at least by virtue of their dependency on claim 1.

**B. Claims 7, 8, 10, 11 and 13**

Since claims 7, 8, 10, 11 and 13 contain features which are analogous to the features recited in claims 2 and 3, Appellants submit that claims 7, 8, 10, 11 and 13 are patentable over the cited references for at least analogous reasons as presented above.

Further, since claims 7, 8, 10, 11 and 13 are dependent on claims 6, 9 and 12, respectively, and McCormack fails to cure the deficient teachings of Justice and Carcerano, Appellants submit that claims 7, 8, 10, 11 and 13 are patentable at least by virtue of their dependency.

**IX. CONCLUSION**

The present Brief on Appeal is being filed in triplicate. Unless a check is submitted herewith for the fee required under 37 C.F.R. §1.192(a) and 1.17(c), please charge said fee to Deposit Account No. 19-4880.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any

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overpayments to said Deposit Account.

Respectfully submitted,

Allison M. Tulino  
Allison M. Tulino  
Registration No. 48,294  
Date: April 9, 2004

SUGHRUE MION, PLLC  
Telephone: (202) 293-7060  
Facsimile: (202) 293-7860

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CUSTOMER NUMBER

## APPENDIX

### CLAIMS 1-13 ON APPEAL:

1. A device management network system including a management server, one or more network devices to be managed, and one or more client devices, each of said one or more network devices comprising:
  - a status information storing part for storing status information;
  - a monitoring part for monitoring predetermined parts to determine whether each of the predetermined parts is functioning properly, and updating the status information stored in said status information storing part so as to include information about all abnormalities that have occurred in the predetermined parts based on monitoring results; and
  - a request responding part for, when receiving a status information request from said management server, sending the status information stored in said status information storing part to said management server, andsaid management service comprising:
  - a status information obtaining part for, when receiving a device-details screen request containing identification information of a network device among said one or more network devices from a client device running a Web browser, obtaining status information stored in said status information storing part of the network device identified by the identification information in the device-details screen request by sending the status information request to the network device;
  - a specifying part for specifying all abnormalities that has occurred in the network device identified by the identification information in the device-details screen request based on the status information obtained by said information obtaining part; and

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### CLAIMS 1-13 ON APPEAL:

an information sending part for sending information indicating all abnormalities specified by said specifying part to the client device that has sent the device-details screen request.

2. The device management network system according to claim 1, wherein said information sending part of said management server sends information containing names of image files associating with the abnormalities specified by said specifying part.

3. The device management network system according to claim 1, wherein the status information in said status information storing part of a network device contains type information of the network device, and

wherein said management server further comprises:

an image storing part for storing a plurality of image files, each of which corresponds to a type information and holds image data representing outside appearance of a network device related to the corresponding type information; and

an image sending part for selecting from the plurality of image files stored in said image storing part an image file corresponding to the type information in the status information obtained by said status information obtaining part, and sending data in the selected image file to the client device that has sent the device-details screen request.

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### CLAIMS 1-13 ON APPEAL:

4. The device management network system according to claim 1, wherein said management server further has functions of said client device.

5. The device management network system according to claim 1, wherein each of said one or more network devices is a network printer.

6. A management server to be attached to a network including one or more network devices to be managed, and one or more client devices having a Web browser, the management server comprising:

a status information obtaining part for, when receiving a device-details screen request containing identification information of a network device among said one or more network devices from a client device running a Web browser, obtaining status information from the network device identified by the identification information in the device-details screen request;

a specifying part for specifying all abnormalities that has occurred in the network device identified by the identification information in the device-details screen request based on the status information obtained by said information obtaining part; and

an information sending part for sending information indicating all abnormalities specified by said specifying part to the client device that has sent the device-details screen request.

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### CLAIMS 1-13 ON APPEAL:

7. The management server according to claim 6, wherein said information sending part sends information including names of image files associating with the abnormalities identified by said identifying part.

8. The management server according to claim 6, wherein the status information that is sent from a network device contains type information indicating a type of the network device, and wherein said management server further comprises:

an image data storing part for storing a plurality of image data each of which representing outside appearance of a network device, and

an image data sending part for selecting from the plurality of image data an image data corresponding to the network device specified by the identification information in the status information obtained by said status information obtaining part, and for sending the image data to the client device that has sent the device-details screen request.

9. A computer readable medium stored with a program for causing a computer to function as a management server to be attached to a network including one or more network devices to be managed, and one or more client devices having a Web browser, the management, server comprising:

a status information obtaining part for, when receiving a device-details-screen request containing identification information of a network device among said one or more network devices

## APPENDIX

### CLAIMS 1-13 ON APPEAL:

from a client device running a Web browser, obtaining status information from the network device identified by the identification information in the device-details screen request;

a specifying part for specifying all abnormalities that has occurred in the network device identified by the identification information in the device-details screen request based on the status information obtained by said information obtaining part; and

an information sending part for sending information indicating all abnormalities specified by said specifying part to the client device that has sent the device-details screen request.

10. The computer readable medium according to claim 9, wherein said information sending part sends information including names of image files associating with the abnormalities identified by said identifying part.

11. The computer readable medium according to claim 9, wherein the status information that is sent from a network device contains type information indicating a type of the network device, and wherein said management server further comprises:

an image data storing part for storing a plurality of image data each of which representing outside appearance of a network device; and

an image data sending part for selecting from the plurality of image data an image data corresponding to the network device specified by the identification information in the status

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information obtained by said status information obtaining part, and for sending the image data to the client device that has sent the device-details screen request.

12. A device management network system method including a management server, one or more network devices to be managed, and one or more client devices, the method comprising:

    sending a device-details screen request from a client device to a management server, the device-details screen request containing identification information of a network device;

    obtaining status information from a network device identified by the identification information in the device-details screen request by communication between the management server and the network device;

    specifying all abnormalities that has occurred in the network device identified by the identification information in the device-details screen request based on the status information obtained from the network device; and

    sending the information indicating all abnormalities from the management server to the client device,

    wherein the information indicating all abnormalities was specified by the network device to the management server.

13. The device management network system method of claim 12, further comprising:

## APPENDIX

### CLAIMS 1-13 ON APPEAL:

storing a plurality of image data in the management server, each of which represents an outside appearance of the network devices; and

selecting from the plurality of image data an image data corresponding to the network device specified by the identification information; and

sending the image data from the management server to the client device that has sent the device-details screen request.